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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,507	03/26/2004	Stephane Cayla	BGC.0002US (N2325-US)	8147

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HOUSTON, TX 77057-2631

EXAMINER

GELIN, JEAN ALLAND

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/810,507

Applicant(s)

CAYLA ET AL.

Examiner

Jean A. Gelin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) _____ is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-3, 6-17, and 19-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Haartsen (US 7,016,372).

Regarding claims 1, 13, and 15, Haartsen teaches an apparatus for transmitting data blocks on a communications channel having a radio link between two stations (i.e., master and slave) including a user equipment (e.g., slave unit), comprising: means for receiving first data blocks from the user equipment (i.e., master has means to receive packet from the master, col. 8, lines 16-65); means for transmitting second data blocks to the user equipment (i.e., packets are alternatively transmitted from one unit to another unit and vice versa, (col. 8, lines 16-65); and means for dynamically setting a polling interval for the transmission of polling messages to the user equipment after transmission of the second data blocks, the polling interval being set in accordance with at least one of: a size of one or more data blocks received by the apparatus from the user equipment, a size of one or more blocks transmitted from the apparatus to the user equipment, and a service to which the user equipment is subscribed (i.e., master

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dynamically adjusts the polling interval based on traffic condition, col. 7, lines 25-41 and col. 8, line 30 to col. 9, line 65).

Regarding claims 2, 16, Haartsen teaches the polling message is an acknowledgement polling message (i.e., within directing packet to a particular slave, col. 8, lines 44-65).

Regarding claims 3, 17, Haartsen teaches the means for dynamically setting a polling interval is adapted to set the polling interval for each user equipment independently (i.e., within the master has complete control over which slave is being polled, col. 8, line 66 to col. 9, line 65).

Regarding claims 6, 19, Haartsen teaches the user equipment comprises one or more user equipments having a first priority and one or more user equipments having a second priority lower than the first priority, and the means for dynamically setting a polling interval is adapted to reduce the polling interval when the user equipments having a first priority are not transmitting (col. 7, lines 42-59 and col. 9, lines 25-67).

Regarding claim 7, Haartsen teaches a buffer means for buffering data blocks to be transmitted to the UE by the apparatus (i.e., inherently master has a buffer or storage device to buffer packet prior to transmit to the slave device, col. 8, lines 16-65).

Regarding claim 8, Haartsen teaches the means for dynamically setting a polling interval is adapted to set the polling interval in accordance with an occupancy state of the buffer means (col. 12, line 61 to col. 13, line 22).

Regarding claims 9, 20, Haartsen teaches the user equipment is located in a radio coverage area of a cellular mobile radio network (col. 4, lines 6-26) and the means

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for dynamically setting a polling interval is adapted to set the polling interval in accordance with at least an estimated used transmission capacity value for the radio coverage area (col. 8, lines 16-65 and col. 10, lines 31-47).

Regarding claim 10, Haartsen teaches the means for dynamically setting a polling interval includes a storage unit for storing information relating to user equipments (i.e., scheduled poll event for the slave, col. 7, lines 25-41).

Regarding claim 11, Haartsen teaches the storage unit includes data relating to any of: a user equipment identifier, a quality of service profile associated with a user equipment, a number of user equipments located within a geographical area (col. 8, lines 44-65).

Regarding claim 12, Haartsen teaches wherein the means for dynamically setting a polling interval is adapted to set the polling interval in accordance with a quality parameter of signals received over the radio link (col. 7, lines 25-69).

Regarding claim 14, Haartsen teaches the apparatus is a packet control unit which has a first input for data from an asynchronous interface and a second input for data from a synchronous interface (col. 4, line 60 to col. 5, line 23, col. 17, lines 31-46).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 4-5 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Haartsen (US 7,016,372) in view of Schoch (US 5,973,609).

Regarding claims 4, 18, Haartsen teaches all slaves receive the packets sent by the master on the forward link, col. 8, lines 45-65). Haartsen does not specifically teach the means for dynamically setting a polling interval is adapted to set the polling interval for a group of user equipments.

However, the preceding limitation is known in the art of communication. Schoch teaches when the system becomes less heavily loaded, users are divided into groups that are then polled, the size of the groups is selected on the number of users having data to transmit, a polling cycle is completed when all groups have been polled (col. 2, lines 15-52, col. 5, line 63 to col. 6, line 13), and polling interval (col. 10, lines 47-67). Therefore, it would have been obvious to one of ordinary skill in the art, at the time of the invention, to implement the technique of Schoch within the system Haartsen in order to dynamically change the group sizes and mappings in response to system activity, and increase the efficiency of the system by polling users per group.

Regarding claim 5, Haartsen in view of Schoch teaches all the limitations above. Schoch further teaches the group of user equipments is defined by a subscription to a service (col. 3, lines 1-14 and col. 5, line 63 to col. 6, line 13).

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

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Koo	US 6,996,119	02/07/2006
Coffee et al.	US 6,892,131	05/10/2005

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jean A. Gelin whose telephone number is (571) 272-7842. The examiner can normally be reached on 9:30 AM to 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JGelin
February 15, 2007

JEAN GELIN
PRIMARY EXAMINER

